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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,280	04/15/2004	Jae-Hong Park	A33914-H - 067515.0173	7950

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BAKER BOTTS L.L.P.
44TH FLOOR
30 ROCKEFELLER PLAZA
NEW YORK, NY 10012-4498

EXAMINER

APPIAH, CHARLES NANA

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/825,280

Applicant(s)

PARK ET AL.

Examiner

Charles Appiah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 250-283 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 250-257, 259-266 and 268-282 is/are rejected.
- 7) ☒ Claim(s) 258, 267, 275 and 283 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/22/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 250-267 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation of the limitation "the radio network" on line 2 of claims 250 and 259 lacks prior antecedent basis in the claims.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 250-257, 259-266, 268-274 and 276-282 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-102 of U.S. Patent No. 6,741,868. Although the conflicting claims are not identical, they are not patentably distinct from each other because all the limitations of claims 250-257, 259-266, 268-274 and 276-282 are broad and are encompassed by the limitations of claims 1-102 of the patent and as such it would have been obvious to one

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of ordinary skill in the art to implement the invention of the instant application as defined by claims 250-257, 259-266, 268-274 and 276-282 in order to interface between a hybrid type mobile terminal, a base station and a core network in a mobile telecommunication network.

4. Claims 250-257, 259-266, 268-274 and 276-282 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7, 13, 14 and 15102 of U.S. Patent No. 6,782,274. Although the conflicting claims are not identical, they are not patentably distinct from each other because all the limitations of claims 250-257, 259-266, 268-274 and 276-282 are broad and are encompassed by the limitations of claims 1-102 of the patent and as such it would have been obvious to one of ordinary skill in the art to implement the invention of the instant application as defined by claims 250-257, 259-266, 268-274 and 276-282 in order to exchange or transmit messages between an asynchronous mobile station and an asynchronous mobile network regardless of an operating type of a core network.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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6. Claims 250-252, 254, 256-257, 259-261, 263, 265-266, 268-271, 273-274, 276-279, 281 and 282 are rejected under 35 U.S.C. 102(e) as being anticipated by Korpela (5,946,634).

Regarding claims 250, 259, 268 and 276, Korpela discloses a method and an apparatus (see Figs. 1-6) for interfacing between a terminal (10) and a core network (30a-30c) connected to a radio network (20a-20c), wherein the terminal has a hybrid operating type being possible to be set as either a synchronous operating type (GSM network) or an asynchronous operating type (B-ISDN network), the method comprising the steps of: recognizing an operating type of the core network on the basis of a core network operating type information contained in a message (see Fig. 9, col. 6, lines 29-41 and col. 8, lines 24-43), to thereby allow the terminal to operate according to the recognized operating type of the core network (see col. 7, lines 18-52).

Regarding claims 251, 260, 269 and 277, Korpela further discloses the step of storing the recognized type of the core network (see col. 8, lines 24-29).

Regarding claims 252, 261, 270, and 278, Korpela further discloses receiving the message having the core network operating type information in a predetermined location through a predetermined channel (see col. 5, line 66 to col. 6, line 7), extracting the core network operating type information from the received message (see col. 6, lines 29-36), and setting an operating type of the of the terminal to the synchronous operating type or the asynchronous operating type on the basis of the recognized operating type of the core network (see col. 7, lines 35-46).

Regarding claims 254 and 263, Korpela further discloses wherein the predetermined location is a core network type information field of a synchronous channel message

Regarding claims 256-257, 265-266, 273-274 and 281-282, Korpela's teaching of the mobile terminal receiving broadcast signals to detect the network type code and the radio bearer control level passing to the protocol stack for each type of backbone network only the information relevant to that backbone network (see col. 6, lines 29-36) reads on the message including a master information block and a system information message.

Regarding claims 271 and 279 Korpela further teaches wherein the predetermined channel is a broadcast control channel (see col. 6, lines 15-36).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 253 and 262 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korpela as applied to claims 252 and 261 above, and further in view of Alperovich et al. 95,896,376).

Regarding claims 253 and 262 Korpela fails to specifically disclose that the predetermined channel is a synchronous channel.

Alperovich discloses a system for the efficient management of channel resources within a digital mobile communications network that includes the use of a synchronization channel (SCH), which is used to carry information for frame synchronization of a mobile station and identification of a base transceiver station (see col. 4, lines 46-65).

It would therefore have been obvious to one of ordinary skill in the art to use the synchronization channel of Alperovich with the system of Korpela in order to provide for the transmission of desired communication information such as system-type identification information as taught by Alperovich while using and managing channel resources efficiently.

9. Claims 255, 264, 272 and 280 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korpela as applied to claims 250, 259, 268 and 276 above, and further in view of Peterson et al., "Third Generation Personal Communication Physical Layer: Status and Open Issues", Information theory and Communications Workshop, 1999. Proceedings of the 1999 IEEE. June 1999, Page 39.

Regarding claims 255, 264, 272 and 280 Korpela teaches the backbone networks being a GSM (or evolution thereof) network (see col. 7, lines 18-39), but fails to specifically disclose wherein the core network operating type information includes an ANSI-41 information representing a synchronous type core network as well as a GSM-MAP information representing an asynchronous type core network.

Peterson discloses status and open issues relating to 3rd Generation Personal Communication Systems, which have resulted in creative physical layer methods for

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providing high-speed 3G services through the development of a single standard based upon the GSM/MAP network architecture by the Third Generation Partnership Project (3GPP) and the development of a single standard based upon the ANSI-41 network architecture by the 3GPP2 group (see abstract, page 39).

It would therefore have been obvious to one of ordinary skill in the art to implement the GSM/MAP architecture and ANSI-41 network architecture of Paterson with Korpela's multiple backbone networks system in order to provide high-speed 3G services to users as taught by Paterson.

Allowable Subject Matter

10. Claims 258, 267, 275 and 283 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Achilleoudis et al. (6,052,386) discloses a transmission system for synchronous and asynchronous data portions.

Kransmo (6,594,242) discloses a method for broadcasting 2nd Generation cellular system control channel information over a 3rd Generation Control Channel to support roaming and handover.

Narayanaswamy (6,295,457) discloses a system for directly connecting a mobile communication system to a data network.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Appiah whose telephone number is 703 305-4772. The examiner can normally be reached on M-F 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 703 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CA


CHARLES APPIAH
PRIMARY EXAMINER